

Clean Sea Fund Report 2/2017 (13 September 2017)

Status as of 31 July 2017	€
Funds in the Clean Sea Fund	MEUR 13.6
Project expenditure	MEUR 11.4
Funds reserved for ongoing projects	MEUR 2,2

The objective of the John Nurminen Foundation's Clean Baltic Sea projects is to improve the status of the Baltic Sea with concrete measures that reduce the nutrient load and environmental risks faced by the sea.

All of the Foundation's Clean Baltic Sea projects and their support activities employ nine people, two of them part-time.

Project progress

The NutriTrade project, launched in 2015, creates a voluntary nutrient trading system for the Baltic area, enabling the implementation of cost-efficient load reduction measures and the neutralization of nutrient discharges. At the same time, the project pilots various promising methods which reduce the nutrient load of the Baltic Sea, such as treating fields in the Archipelago Sea area with gypsum, and also methods for removing nutrients already in the sea, such as blue mussel farming, and fish stock management. All pilot projects have moved ahead according to plans, including the implementation of the Nutribute crowdfunding platform, which is aimed at projects that reduce nutrient load. Already, the water utilities of four Finnish cities have neutralized their annual phosphorus discharges using the Nutribute platform. Moreover, the project has looked into the possibilities of utilizing flexible and cost-efficient methods, such as voluntary nutrient trading, on a wider scale in Baltic Sea protection.

The Local Fishing project, launched by the Foundation in 2015, removes nutrients from the sea to land through fish stock management of cyprinid fish, which are then used for human consumption. The catch is used to prepare fish patties and other fish products. In 2017, roughly twenty fishermen were recruited, and fish stock management was underway in May. Fish patties will be available in 2017 at least in the institutional kitchens of the Turku area, Espoo, and the Palmia cafeterias in Helsinki. In April 2017, the Foundation and Kesko launched the Pirkka archipelago fish patty, a consumer product made from fish stock management catch that is available nationwide. The final goal is to commercialize the entire production chain so that at the end of the project, fish stock management in the marine area will proceed without the phosphorus removal fee now paid to the fishermen.

The phosphorus removal systems provided by the Foundation to the wastewater treatment plants of Vyborg and Gatchina, the second largest city of the Leningrad region, were deployed in 2015-2016. These measures reduce the nutrient load of the Gulf of Finland by 50 tonnes per year, equalling twice the volume of discharges from the Helsinki Viikinmäki treatment plant. The next step in the wastewater projects in northwestern Russia is improving the efficiency of phosphorus removal from the wastewaters of the city of Kingisepp; these investments will be made by early 2018. This project will reduce the phosphorus load discharged to the sea by 13 tonnes annually.

An agreement has been concluded with the water utility of the Belarusian city of Vitebsk, stating that nutrient loads leaving the treatment plant will be cut by improving treatment efficiency beyond national minimum requirements, to match the recommended level of the Baltic Marine Environment Commission. More efficient phosphorus removal at the city wastewater treatment plant will begin in autumn 2016, and enable a reduction of nearly 50 tonnes in the Baltic Sea's eutrophication-inducing load. In connection with a project led by the Foundation and the BSAP Trust Fund, the enormous Udarnik poultry farm near Vyborg has been provided with a filtering system for nutrient-rich runoff waters. A treatment system for

runoff waters from fields was installed in the autumn of 2015, and a filtering system for manure pools was deployed in June 2017.

In May 2016, the Board of the Foundation approved a new project which seeks to manage the phosphorus discharges from the biogas plant currently under construction in Lviv, Ukraine. The project can prevent a load of more than 100 tonnes of phosphorus from entering the Baltic Sea via the Poltva River.

Fundraising and realised objectives

Funds raised for the Clean Baltic Sea projects in 2005 - 2016 amounted to a total of approximately €13.6 million, of which roughly €11.4 million has been used in project implementation. The remaining monies in the Fund, i.e. €2.2 million, have been reserved for projects that are currently ongoing or being planned.

Correction to the previous Fund Report: an extra €1 million was allocated to project expenditure. On 31 December 2016, €10.7 million (not €11.7 million) had been used by projects, and the funds reserved to ongoing projects were €2.9 million (not €1.9 million).

So far, projects have been implemented in a total of 25 targets, of which 17 have been completed. As a result of the projects, annual phosphorus discharges entering the Baltic Sea have been reduced by a total of 2,100 tonnes. Moreover, the John Nurminen Foundation has provided technical expertise at two project sites, namely the Kingisepp fertilizer factory and the Warsaw wastewater treatment plant, thereby also contributing to the significant reduction of phosphorus discharges. The projects that are underway now will reduce the annual phosphorus load of the Baltic Sea by many hundreds of tonnes, and will, moreover, create new and efficient ways to reduce nutrient loads that are also applicable in Finland.

New projects

This report monitors the implementation of projects launched up until the year 2016. Projects that are implemented on the basis of a later decision will be financed from the Clean Baltic Sea project fundraising account, established in 2016.

In 2017, the Foundation launched a project that assesses the risks involving nutrient discharges from biogas plants in the Baltic Sea area. The risk assessment will be completed by the end of 2017. Based on the assessment, the Foundation will decide what further actions are necessary.

The Foundation has participated in the creation of the Baltic Sea Counter, released in the winter of 2017. With the counter, consumers can calculate how their lives impact the nutrient loads that cause eutrophication in the Baltic Sea. Based on the counter, the Foundation has also produced the mobile game Splash, aimed at children and seeking increased awareness of the Baltic Sea amongst children and youth.

October 2017 will see the launch of the BEST project (Better Efficiency for Industrial Sewage Treatment), which is partly financed by EU, and implemented by the Foundation in cooperation with the City of Helsinki Environment Centre and 16 other international partners. The project's objective is to reduce, in the entire catchment area of the Baltic Sea, discharges of nutrients and harmful substances that are carried with industrial wastewaters to municipal treatment plants, and from there to the waterways.